

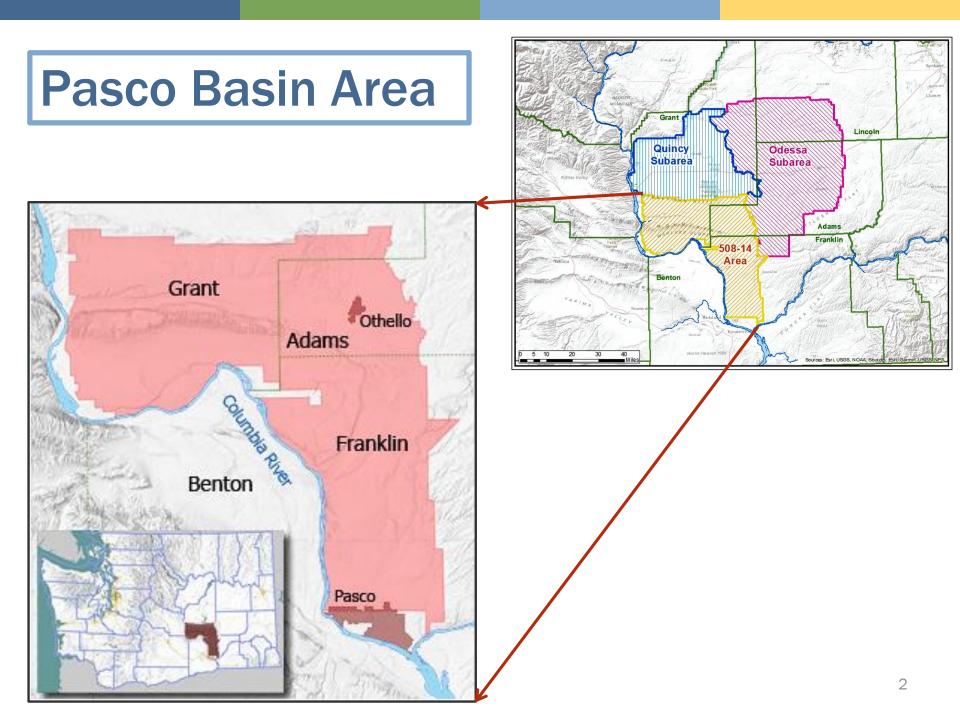


#### Pasco Basin Groundwater Management Efforts

**Columbia Basin Development League** 

November 14, 2023

G. Thomas Tebb Director, Office of Columbia River Department of Ecology

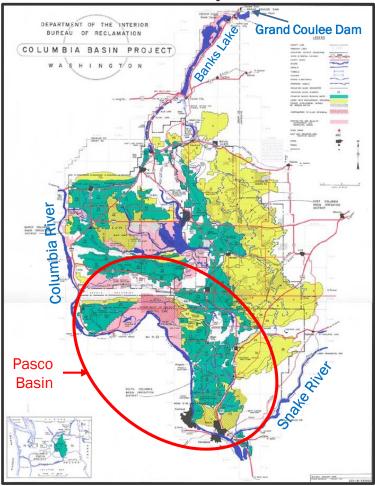


## **Columbia Basin Project Irrigation**

- Columbia Basin Act early 1940s
- Irrigation in the basin relies on surface water from Federal Project (~680,000 acres)
- Return flows seep into ground and commingled with natural groundwater
- State issues withdrawal of groundwater in coordination with Reclamation, later designated as interim rule 508-14 WAC

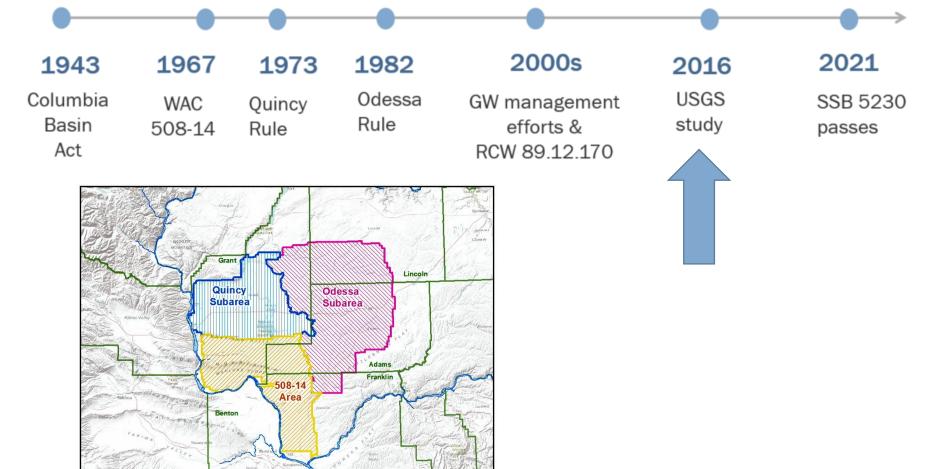


Bureau of Reclamation Federal Columbia Basin Project



Adapted from DOI, Bureau of Reclamation Columbia Basin Project Map

## **Pasco Basin History**



### USGS Study and Groundwater Model

- 2016 USGS Report
- Increase in Groundwater Storage
- Model Updates/Revisions
- Management Scenarios

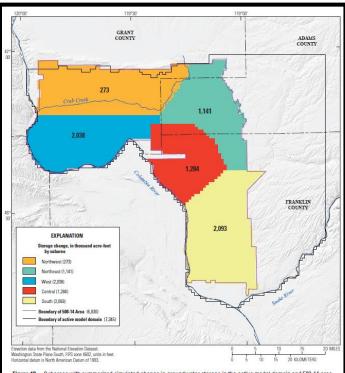
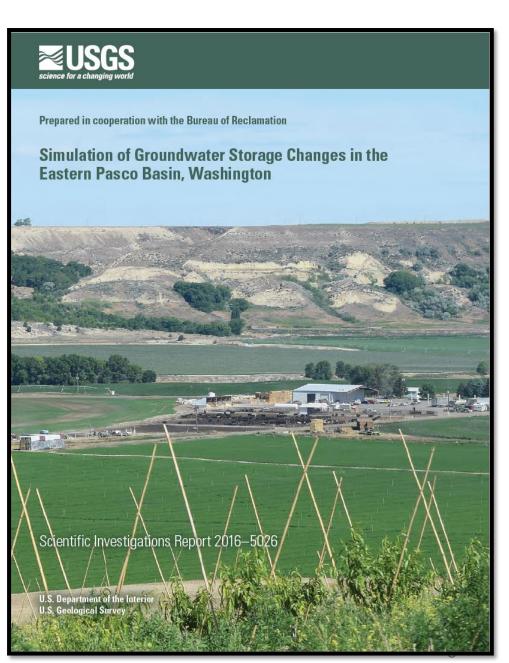


Figure 18. Subareas with summarized simulated change in groundwater storage in the active model domain and 508-14 area, eastern Pasco Basin, Washington.



#### From USGS Scientific Investigations Report 2016-5026

## Pasco Basin History: 2021 Legislative Amendment



- <u>Allocation through agreement</u> of groundwater that exists as a result of the Columbia Basin Project
- <u>Clarify process</u> with subarea boundary designation under RCW 90.44.130
- Agreements fulfill requirements for groundwater availability
- Directs Ecology to conduct rulemaking including outreach

#### **Current Efforts and Next Steps**



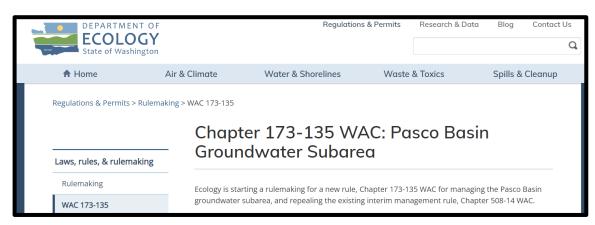
#### **Outreach and Public Input**

## **Memorandum of Understanding**

- Agreement between Reclamation and Ecology to pursue groundwater co-management strategy
- Focus on public involvement and outreach and input
- Multi-step process for Groundwater Management:
  - Ecology Rulemaking and Outreach
  - **Boundary Designation** for Pasco Basin Groundwater Subarea
  - Groundwater Study and Groundwater Flow Model for Pasco Basin area
  - <u>Co-management Agreement</u> between Ecology and Reclamation for allocating and managing groundwater under RCW 89.12.170

#### Pasco Basin Rulemaking Chapter 173-135 WAC

- RCW 89.12.170 directs Ecology to adopt a rule laying out the process for implementing the co-management agreement
- Rulemaking will result in a <u>new</u> rule Chapter 173-135 WAC and <u>repeal</u> of older interim rule Chapter 508-14 WAC
- Includes a review under State Environmental Policy Act (SEPA)
- Visit our website:



## **Boundary Designation**

- Designate boundary under RCW 90.44.130
- Process: public notices, Ecology findings, and final order
- Boundary is defined by order, but volumes to be allocated within the boundary are determined through agreement and supported by groundwater studies

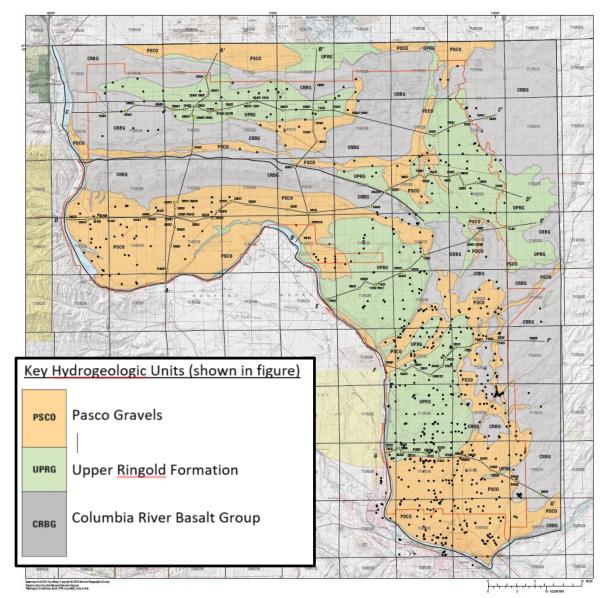




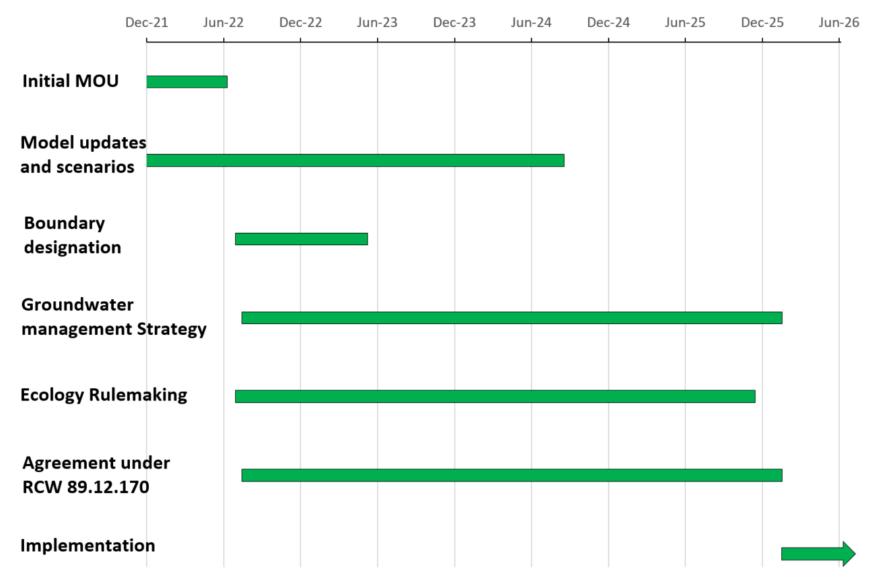
Outline of 508-14 area [filed 1986]

#### **USGS Study and Groundwater Model**

- Study seeks to quantify increases in groundwater storage as result of Columbia Basin Project return flows
- Majority of mounded water in sedimentary deposits that overlie the basalts
- Revisions and recalibration underway to update model
- Next steps: peer review and modeling scenarios to:
  - support development of co-management strategy
  - help inform agreement on groundwater allocation volumes and depth/location



### **Draft Schedule**



# Thank you!

## **Questions?**

https://ecology.wa.gov/Regulations-Permits/Laws-rulesrulemaking/Rulemaking/WAC-173-135

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